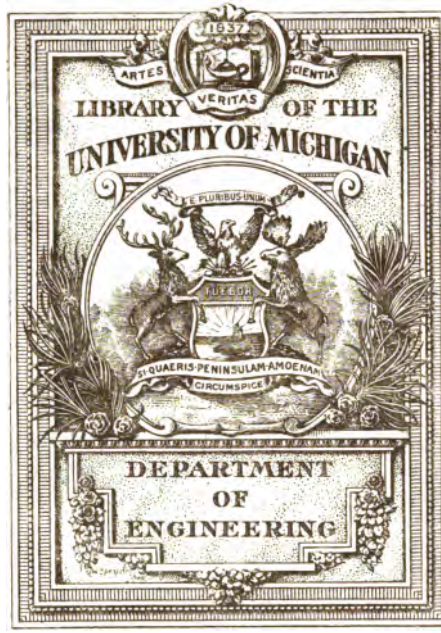
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GLOSSARY OF AVIATION TERMS
TERMES D'AVIATION

ENGLISH-FRENCH
ILLUSTRATED

FRANCAIS-ANGLAIS
ILLUSTRÉ

COMPILED BY

LIEUT. VICTOR W. PAGÉ, A.S.S.C., U.S.R.

AND

LIEUT. PAUL MONTARIOL, FRENCH FLYING CORPS

Assigned to

INSTRUCTION DEPARTMENT

SIGNAL CORPS AVIATION SCHOOL

MINEOLA, LONG ISLAND

LISTS OF AVIATION TERMS IN GENERAL USE GIVEN IN FRENCH WITH ENGLISH EQUIVALENTS AND IN ENGLISH WITH CORRESPONDING FRENCH WORDS

A VALUABLE REFERENCE FOR ALL ENGAGED IN THE ALLIED AVIATION SERVICE

1917

THE NORMAN W. HENLEY PUBLISHING CO.

2 WEST 45TH STREET

NEW YORK CITY

Printed in U.S.A.

COMPOSITION, ELECTROTYPING AND PRESSWORK
BY BRAUNWORTH & CO., BROOKLYN, NEW YORK

APPROVED FOR PUBLICATION

MAJOR W. G. KILNER, S.C., U.S.A.

COMMANDING OFFICER

SIGNAL CORPS AVIATION SCHOOL

HAZELHURST FIELD

MINEOLA, L. I.

PREFACE.

As there are numerous young men training in this country, both in ground schools and at flying fields for the aviation service, and as much of this will probably be performed in France, it seems desirable to compile a brief glossary of commonly used aviation terms in both French and English to facilitate intercourse between the pilots and mechanics speaking different languages who work together in the present emergency.

These lists are enlarged from a briefer series prepared originally for use in teaching classes at the Signal Corps Aviation School, Mineola, L. I. The illustrations accompanying the text should make everything clear about which any doubt could exist. As no definitions are given, the booklet is more in the nature of a glossary or list of words than a dictionary, and is intended only for use of those already familiar with aviation. Some of the equivalents may not be literally correct, but are selected with a view to listing only terms in common, everyday usage.

The painstaking work of Lieut. Paul Montariol, of the French Flying Corps, assigned as instruction officer at Mineola, L. I., has been of great value in furnishing French equivalents and insures that these will conform to the accepted practice abroad. It is believed that this

compilation will be of some value in securing closer coöperation and more intelligent discussion of aviation subjects between members of our oversea aviation forces and our non-English speaking allies.

VICTOR W. PAGÉ,
1st Lieut. A. S. S. C., U. S. R.

October, 1917.

CONTENTS

ENGLISH TERMS

FRENCH TERMS

LIST OF ILLUSTRATIONS

GLOSSARY OF

AVIATION TERMS

ENGLISH—FRENCH

GLOSSARY OF AVIATION TERMS

ENGLISH—FRENCH

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
AIRMAN	AVIATEUR
ADJUSTMENT	RÉGLAGE D'UN APPAREIL
AIRPLANE	AEROPLANE, AVION
AIRSHIP	AERONAT
ALTIMETER	ALTIMÈTRE
ALTITUDE	ALTITUDE
ANGLE OF INCIDENCE	ANGLE D'INCIDENCE
ANGLE OF ATTACK	ANGLE D'ATTAQUE
APPARATUS	APPAREIL, ENGIN
AVIATOR	AVIATEUR
BALANCE	ÉQUILIBRE
BALLOON	BALLON
BAROGRAPH	BAROGRAPHE
BASKET	NACELLE
BREAKDOWN	PANNE
BUS (Comm. for Plane)	COUCOU, ZINC, TAXI (Vulg.)

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
CAMBER	COURBURE
CANVAS HANGAR	HANGAR DE TOILE, (Vulg. BESSONNEAU)
CARROUSEL (Involuntary sharp turns on ground)	CHEVAL DE BOIS (Tournants involontaires au sol)
CENTER OF GRAVITY	CENTRE DE GRAVITÉ
CENTER OF PRESSURE	CENTRE DE PRESSION
CENTER OF THRUST	CENTRE DE POUSSÉE
CHOCK	CALE
COMPASS	BOUSSOLE
CRABBING	MARCHER EN CRABE
DEAD LEAF (Falling like a)	FEUILLE-MORTE (Descente en)
DIHEDRAL	DIÈDRE
DIVE (TO)	PIQUER
DRAG	RÉSISTANCE À L'AVANCEMENT
DRIFT	DÉRIVER, DÉPORTER, DÉRIVE
DUAL CONTROL	DOUBLE COMMANDE
ENGINE	MOTEUR
FACTOR OF SAFETY	COÉFFICIENT DE SÉCURITÉ
FLARE (Guide for landing)	FEU D'ATTERRISSAGE

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
FUR LINED BOOTS	CHAUSSONS FOURRÉS
FUR LINED GLOVES	GANTS FOURRÉS
GAP	ESPACE ENTRE LES PLANS
GLIDE	PLANER
GOGGLES	LUNETTES
GRASS CUTTING (Flying close to the ground)	RASE MOTTES (Vol au ras du sol)
HANGAR	HANGAR
HEIGHT INDICATOR	ALTIMÈTRE
HELMET	CASQUE
HYDROAIRPLANE	HYDROAEROPLANE
INCIDENCE	INCIDENCE
LAND (To)	ATTERRIR
LANDING	ATTERRISSAGE
LANDING GROUND	TERRAIN D'ATTERRISSAGE
LANDING ON NOSE & REMAINING TAIL HIGH	SE METTRE EN PYLONE
LANDING SHEET (Cloth marker)	DRAP D'ATTERRISSAGE
LIFT	FORCE ASCENSIONNELLE
LINE OF FLIGHT	LIGNE DE VOL

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
LOGGY, SLUGGISH	MOU, TANGENT
LOOPING THE LOOP	LOOPING, BOUCLER LA BOUCLE
MAP	CARTE
MOTIVE POWER	FORCE MOTRICE
NOSING UP	MONTER
NOSING DOWN	DESCENDRE, PIQUER
NOSE HEAVY	LOURD DU NEZ
NOSE SPIN	VRILLE SUR LE NEZ
OBSERVER	OBSERVATEUR
ORIENTATION	ORIENTATION
PANCAKE (Landing)	PERTE DE VITESSE (Atterrissage)
PLANE	AVION
Battling Plane	Avion de Chasse
Reconnoitering Plane	Avion de Reconnaissance
Bombarding Plane	Avion de Bombardement
PILOT	PILOTE
PROPELLER PITCH	PAS DE L'HÉLICE
PROPELLER WASH	SOUFFLE DE L'HÉLICE
PUSHER	AVION MU PAR HÉLICE PROPULSIVE
REVOLUTIONS (R.P.M.)	TOURS (À LA MINUTE)

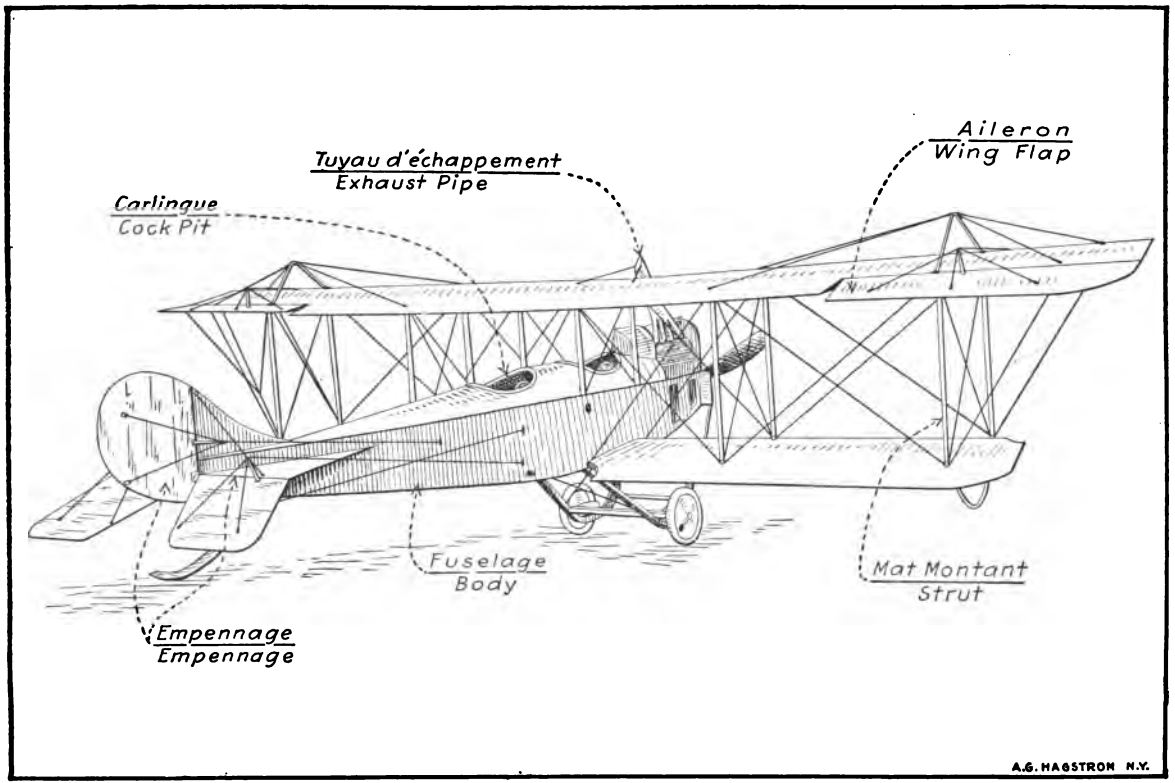


Fig. 1.—Airplane Viewed from rear Showing Important Control Elements
Avion vue arrière montrant les principales commandes

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
ROCKING	REMOUS
SIDE SLIP	GLISSADE SUR L'AILE
SLOW SPEED	RALENTIR
SLUGGISH	TANGENT, MOU
SOMERSAULT (To)	CAPOTER
SPEED INDICATOR	INDICATEUR DE VITESSE
SQUADRON	ESCADRILLE
STAGGERED WINGS	PLANS DÉCALÉS
STALL	PERTE DE VITESSE (en l'air)
STUNTS	ACROBATIES
TAIL DIVE	GLISSADE SUR LA QUEUE
TAIL SPIN	VRILLE
TO BANK	INCLINER, PENCHER
TO DIVE	PIQUER
TO DRIFT	DÉRIVER
TO FLY OVER	SURVOLER
TO LEAVE THE GROUND	DÉCOLLER
TO START ENGINE	METTRE EN MARCHE
TO SWITCH OFF	COUPER LE CONTACT
TO SWITCH ON	METTRE LE CONTACT
TO TILT	INCLINER, PENCHER
TO TAXI	ROULER AU MOTEUR

FLYING FIELD TERMS	TERMES EMPLOYÉS SUR L'AERODROME
TRACTOR	AVION MU PAR HÉLICE TRACTIVE
TURNING	TOURNANT, VIRAGE
TURN OVER ON THE WING	RENVERSEMENT (SUR L'AILE)
UNION SUIT	COMBINAISON
VEERING	VIRAGE
WASH IN, WASH OUT	RÉGLAGE DE L'INCIDENCE
WIND CONE	MANCHE À VENT
WINDWAY	DÉRIVE
WING SPAN	ENVERGURE
WING WARPING	GAUCHISSEMENT
ZUHMING, ZOOMING	MONTER EN CHANDELLE

THE PLANE	L'AVION
AXLE	ESSIEU
BAROGRAPH	BAROGRAPHE
BIPLANE	BIPLAN
BLADE (PROPELLER)	PALE
BODY	FUSELAGE

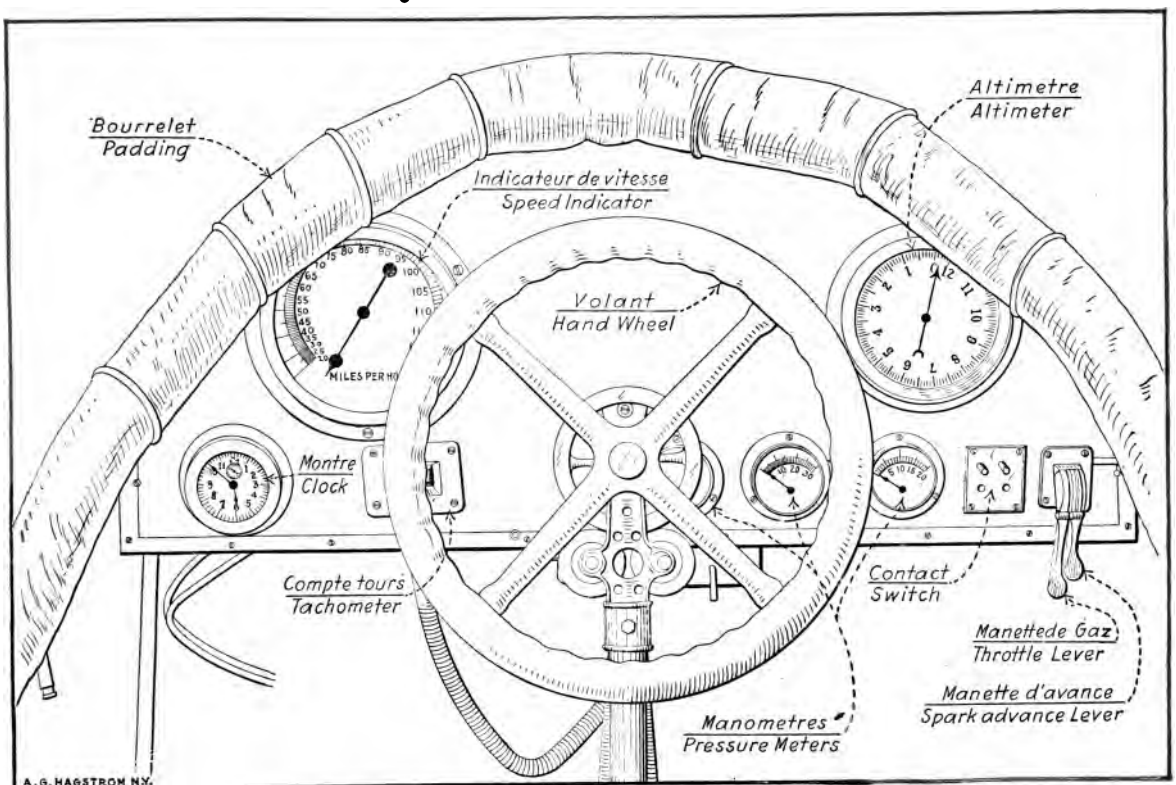


FIG. 2.—MEASURING, INDICATING AND CONTROL ELEMENTS OF AIRPLANE
COMMANDES ET INSTRUMENTS DE BORD D'UN AVION.

THE PLANE	L'AVION
BOLT	BOULON
BRACING STRUT	JAMBE DE FORCE
BRACING TUBE	TIRANT
BRACING WIRES	CROISILLONS
BRONZE BEARING OF AXLE GUIDE	PATIN DE GLISSIÉRE
CABANE	CABANE
CABLE	CABLE
CELLULE	CELLULE
CENTRAL PANEL	PLAN CENTRAL
CLOTH WINDING	MAROUFLAGE
COCKPIT	CARLINGUE
COMPASS	BOUSSOLE
CONTROL BRIDGE	COMMANDES À PONT
CONTROL ELEMENTS	COMMANDES
CONTROL STICK	MANCHE À BALAI
CORD WINDING	TRANSFIL
COVER	HOUSSE
CUSHION	COUSSIN
DIHEDRAL	DIÈDRE
DOPE	ENDUIT
ELEVATOR	STABILISATEUR (Gouvernail de Profondeur)
ENGINE BED	BERCEAU DU MOTEUR
ENGINE SPIDER SUPPORT	ARAIGNÉE SUPPORT DE MOTEUR

THE PLANE	L'AVION
FAIR	PROFIL
FAIRING	FUSELÉ, PROFILÉ
FASTENING	ATTACHES
FIN (TAIL)	DÉRIVE (PLAN)
FITTINGS	FERRURES, GODETS
FLEXIBLE SHAFT	TRANSMISSION FLEXIBLE
FLIPPERS	VOLETS DE PROFONDEUR, STABILISATEUR
FLOORING	PLANCHER
FOOT LEVER	PALONNIER
FRAME	CHASSIS
FUSIFORM FRAME	FUSELAGE
GLASS GAUGE	TUBE DE NIVEAU
GRAVITY TANK	RESERVOIR EN CHARGE
GUIDE	GLISSIÈRE
HANDLE	POIGNÉE
HINGE	CHARNIÈRE
HOLLOW WOOD	BOIS CREUX
HOOD	CAPOT
HORN	GUIGNOL
HUB	MOYEU
JOY STICK	MANCHE À BALAI
KNUCKLE	CHARNIÈRE

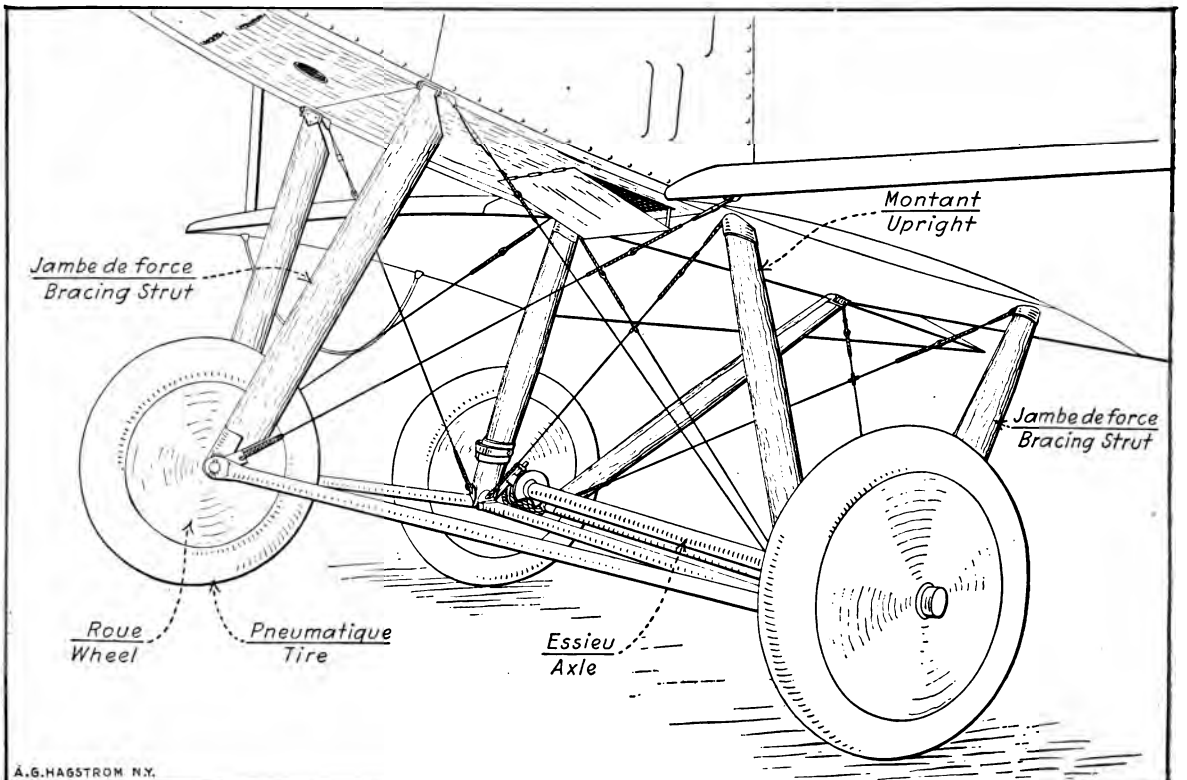


FIG. 3.—AIRPLANE LANDING GEAR OF THREE-WHEEL TYPE SHOWING MAIN COMPONENTS
TRAIN D'ATTERRISSAGE À TROIS ROUES

THE PLANE	L'AVION
LAMINATED WOOD	CONTREPLAQUÉ (BOIS)
LANDING GEAR	TRAIN D'ATTERRISSAGE
LEADING EDGE	BORD D'ATTAQUE ARÉTIER AVANT
LINEN	TOILE
LONGERON LONGITUDINAL BAR	LONGERON
LOUVRES	PERSIENNES
MAP HOLDER	PORTE-CARTES
MONOPLANE	MONOPLAN
NUT	ECROU
PADDING	BOURRELET
PANEL (CENTRAL)	PLAN CENTRAL
PEDAL	PÉDALE
PIANO WIRE	CORDE À PIANO
PRESSURE PUMP	POMPE À PRESSION
PRESSURE TANK	RÉSERVOIR SOUS PRESSION
PROPELLER	HÉLICE
PROPELLER FLANGE	FLASQUE D'HÉLICE
PULLEY	POULIE
RIM	JANTE
ROPE	CORDE
RUDDER	GOUVERNAIL

THE PLANE	L'AVION
RUDDER BAR	PALONNIER
RUNNER	PATIN, PATINNAGE
SAFETY BELT	CEINTURE DE SURETÉ
SAFETY WIRES	FREIN DE SURETÉ
SCREW	HÉLICE
SEAT	SIÈGE
SHAFT (FLEXIBLE)	TRANSMISSION FLEXIBLE (Vulg. BOWDEN)
SHEETING	BLINDAGE
SHOCK ABSORBER	EXTENSEUR (Vulg. SANDOW)
SIDE PANEL	PANNEAU
SINGLE SEATER	MONOPLACE
SKID	PATIN, PATINNAGE
SPOKES	RAYONS
STABILITY PLANES	EMPENNAGE
STABILIZER	PLAN FIXE DE QUEUE
STABILIZING FIN	PLAN DE DÉRIVE
STEERING WHEEL	VOLANT
STIRRUP	ÉTRIER
STRUT	MAT, MONTANT
SUPPORTING CASTING	PIED
TACHOMETER	COMPTE TOURS
TAIL	QUEUE
TAIL FIN	PLAN DE DÉRIVE
TAIL SKID	BÉQUILLE
TANK	RÉSERVOIR

THE PLANE	L'AVION
THIMBLE	COSSE
THREE SEATERS	TRIPLACE
THROTTLE	MANETTE
TILTING WINGS	AILERONS
TIRE	PNEU, PNEUMATIQUE
TRACTOR SCREW	HÉLICE TRACTIVE
TRAILING EDGE	ARÉTIER ARRIÈRE, BORD DE SORTIE
TRIPLANE	TRIPLAN
TUBE	TUBE
TURN BUCKLE	TENDEUR
TURRET	TOURELLE
TWO-SEATER	BIPLACE
VARNISH	VERNIS
WHEEL	ROUE
WIND SHIELD	PARE BRISE
WING	AILE, PLAN
WING COVERING	ENTOILAGE
WING RIBS	NERVURES
WING SPAN	ENVERGURE
WING SPAR	BRAS D'AILE
WING SUPPORT	ATTACHES D'AILES
WIRE STAY	TENDEUR
THE ENGINE	**LE MOTEUR**
ADJUSTING NUT	MOLETTE

THE ENGINE	LE MOTEUR
ADVANCE SPARKING	AVANCE A L'ALLUMAGE
AIR FEEDER	MANCHE À AIR
AXLE	AXE
BABBITT METAL	ANTIFRICTION
BALL BEARING	ROULEMENT À BILLES
BASE BEARING	PALIER
BATTERY	PILE
BEARING BOX	COUSSINET
BEVEL GEAR	PIGNON CONIQUE, PIGNON D'ANGLE
BOLT	BOULON
BRAKE	FREIN
BREAKDOWN	PANNE
BREATHER PIPE	RENIFLARD
CAM	CAME
CAM ROLLER	GALET
CAMSHAFT	ARBRES À CAMES
CARBURETOR	CARBURATEUR
CELL	BATTERIE
CHAIN	CHAINE
CLUTCH	EMBRAYAGE
COG	PIGNON
COIL	BOBINE
COIL SPRING	RESSORT À BOUDIN

THE ENGINE	LE MOTEUR
COIL VIBRATOR	TREMBLEUR
COMBUSTION CHAMBER	CHAMBRE DE COMPRESSION
COMPENSATOR	COMPENSATEUR
CONTACT BREAKER	DISPOSITIF DE RUPTURE
CONNECTING ROD	BIELLE
CORE HOLE PLUG	BOUCHON DE DESSABLAGE
COUNTERSHAFT	ARBRE SECONDAIRE
CRANK	MANIVELLE
CRANK CASE	CARTER
CRANKSHAFT	VILBREQUIN
CRANK SHAFT JOURNAL	SOIE DU VILBREQUIN
CRANK THROW	COUDE DE VILBREQUIN
CYLINDER	CYLINDRE
CYLINDER HEAD	CULASSE
DISTRIBUTOR	DISTRIBUTEUR
DRAIN PLUG	BOUCHON DE VIDANGE
DRY BATTERY	PILE SÈCHE
ENGINE	MOTEUR
ENGINE BED	BERCEAU DE MOTEUR
ENGINE SUPPORT SPIDER	ARAIGNÉE SUPPORT DE MOTEUR
EXHAUST	ÉCHAPPEMENT

THE ENGINE	LE MOTEUR
EXHAUST MANIFOLD	COLLECTEUR D'ÉCHAPPEMENT
EXHAUST PIPE	TUYAU D'ÉCHAPPEMENT
EXHAUST VALVE	SOUPAPE D'ECHAPPEMENT
FEEDING	ALIMENTATION
FEED PUMP	POMPE D'ALIMENTATION
FLOAT	FLOTTEUR
FLOAT CHAMBER	NIVEAU CONSTANT
FLYWHEEL	VOLANT
FUEL PIPE	ARRIVÉE D'ESSENCE
FULCRUM	AXE, OU POINT D'APPUI D'UN LEVIER
GEARS, GEARING	ENGRENNAGE
GEAR CASE	CARTER
GOVERNOR	REGULATEUR
GREASE CUP	GRAISSEUR
GRIND (To)	RODER
GROUND WIRE	FIL DE MASSE
HOSE	BOYAU (Caoutchouc)
HORSE POWER	CHEVAL VAPEUR (H.P.)
IGNITION	ALLUMAGE

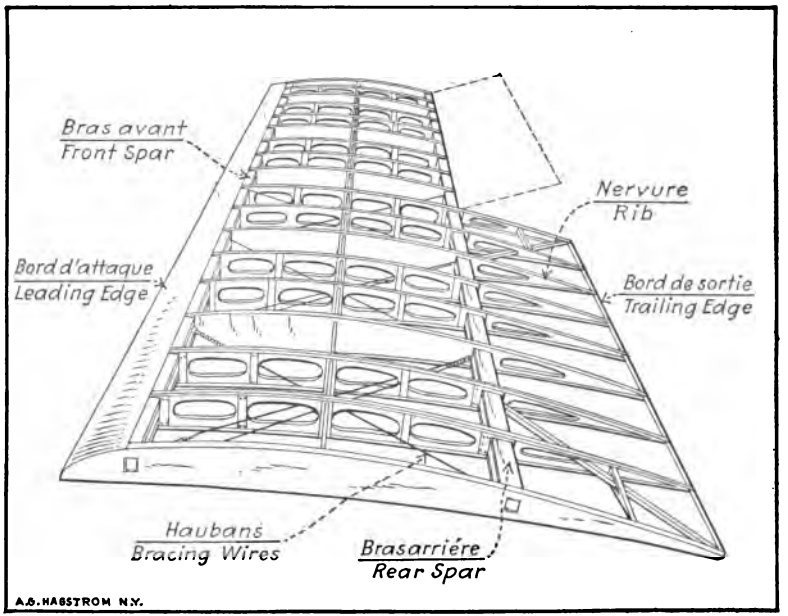


FIG. 4.—SKELETON STRUCTURE OF AIRPLANE WING
SQUELETTE D'UNE AILE D'AVION

THE ENGINE	LE MOTEUR
INDIA-RUBBER PIPE (gasoline hose)	DURIT
INJECTOR, SPRAY NOZZLE	GICLEUR
INLET	ADMISSION
INLET PIPE	TUYAU D'ARRIVÉE
INLET VALVE	SOUPAPE D'ADMISSION
KNOCKING	COGNER
LATE EXHAUST VALVE TIME	RETARD À L'ÉCHAPPEMENT
LEAF SPRING	RESSORT À LAMES
MAGNET	AIMANT
MAGNETO	MAGNETO
MISHAP	PANNE
MISSING	RATÉ
NEEDLE VALVE	POINTEAU
NUT	ÉCROU
OIL CUP	GRAISSEUR
OIL GROOVES	PATTES D'ARAIGNÉES, GOUTTIÈRES
PACKING	JOINT
PETCOCK	ROBINET DE DÉCOMPRESSION

THE ENGINE	LE MOTEUR
PINION	PIGNON
PIPE	TUYAU
PISTON RING	SEGMENT
PLATINUM TIPPED SCREW	VIS PLATINÉE
PRESSURE	PRESSION
PRESSURE METER	MANOMÈTRE
PRIMARY	PRIMAIRE
PUMP	POMPE
RADIATOR	RADIATEUR
REDUCTION GEARING	DÉMULTIPLICATEUR
REGULATING SCREW	VIS DE RÉGLAGE
ROCKER	CULBUTEUR
ROTARY	ROTATIF
SAFETY GAP	PARAFOUDRE
SCREW	VIS
SEGMENT	SEGMENT
SHAFT	ARBRE
SPARK PLUG	BOUGIE
SPARK PLUG WIRE	FIL DE BOUGIE
SPEED OF ROTATION	RÉGIME
SPLIT PIN	GOUPILLE FENDUE
SPRING	RESSORT
STORAGE BATTERY	ACCUMULATEUR
SUCTION	ASPIRATION
TANK	RÉSERVOIR

THE ENGINE	LE MOTEUR
TAPE	CHATERTUN
THROTTLE DISK	VOLET DE CARBURATEUR
THRUST BEARING (Ball)	BUTÉE À BILLES
TOGGLE	CABILLOT
VALVE	SOUPAPE
VALVE GUIDE	GUIDE DE SOUPAPE
VALVE SEAT	SIÈGE DE SOUPAPE
VALVE STEM	TIGE DE SOUPAPE
VENTURI TUBE	DIFFUSEUR
WATER JACKET	CHEMISE D'EAU
WIRE CONDUIT	CONDUIT DE FILS, CLARINETTE

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
ACID	ACIDE
ADJUSTABLE WRENCH	CLEF ANGLAISE
ALCOHOL	ALCOOL
ALLOY	ALLIAGE
ALUMINUM	ALUMINIUM
AMPERE	AMPÈRE
ANGLE IRON	CORNIÈRE
ANVIL	ENCLUME
ARMATURE	ARMATURE

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
ASBESTOS	AMIANTE
AUTOGENOUS WELDING	SOUDURE AUTOGÈNE
AXLE END	TOURILLON
BABBITT METAL	ANTIFRICTION
BAG	SAC
BATH	BAIN
BEVEL	BISEAU
BIT	MÈCHE
BLADE	LAME
BLOW TORCH	LAMPE À SOUDER, CHALUMEAU
BOILER	CHAUDIÈRE
BOLT	BOULON
BORE	ALÉSAGE
BRAZING	BRASURE
BREAK (TO)	CASSER, BRISER
BRONZE	BRONZE
CAN	BIDON
CAPE CHISEL	BURIN
CAST IRON	FONTE
CAST STEEL	ACIER FONDU
CASTOR OIL	HUILE DE RICIN
CHAMOIS SKIN	PEAU DE CHAMOIS
CHISEL	CISEAU À FROID
COAL	CHARBON
COCK	ROBINET

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
COMPASSES	COMPAS
COPPER	CUIVRE
COPPER WIRE	FIL DE CUIVRE
COVER	HOUSSE, COUVERCLE
CORK	BOUCHON
CRACK	FENTE
CROW BAR	PINCE, LEVIER
CUTTING PLIERS	PINCE COUPANTE
DEGREE	DEGRÉ
EBONITE	ÉBONIT
ELECTRIC WIRE	FIL ÉLECTRIQUE
EMERY CLOTH	TOILE ÉMERI
EMPTYING	VIDANGE
FAT	GRAISSE
FILE	LIME
FLANGE	BRIDE
FLAT PLIERS	PINCE PLATE
FUNNEL	ENTONNOIR
GALVANIZED	GALVANISÉ
GASOLINE	ESSENCE
GAUGE	JAUGE
GREASE	GRAISSE
GROOVE	GORGE
GIMLET	VRILLE

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
HAMMER	MARTEAU
HAND DRILL	FORET
HANDLE	POIGNÉE
INSULATOR	ISOLANT
IRON	FER
IRON MOUNTING	FERRURE
IRON WIRE	FIL DE FER
JACK	CRIC
JACK SCREW	VÉRIN
JOINT	RACCORD
KEROSENE	PÉTROLE (Lampant)
KEY	CLAVETTE
KNOT	NŒUD
LAG SCREW	TIREFONDS
LATHE	TOUR
LEAD	PLOMB
LEAKAGE	FUITE
LEVER	LEVIER
LINK	MAILLON
LINK MOTION	COULISSE
MANDREL	MANDRIN
MICA	MICA
MINERAL OIL	HUILE MINÉRALE

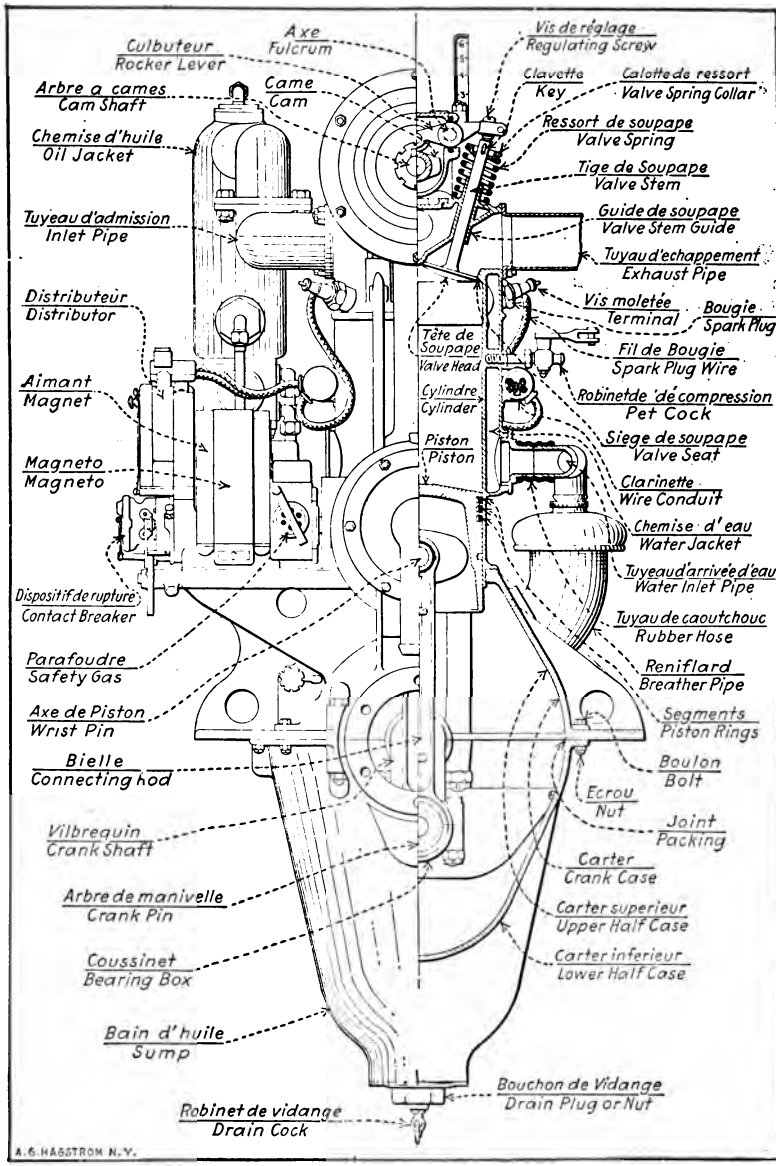


FIG. 5.—PART SECTIONAL END VIEW OF HALL-SCOTT AIRPLANE ENGINE SHOWING IMPORTANT PARTS

MOTEUR D'AVION HALL-SCOTT DEMIE COUPE, MONTRANT LES PARTIES IMPORTANTES

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
NAIL	CLOU
NICKEL	NICKEL
NOTCH	CRAN
NUT	ÉCROU
OIL	HUILE
OIL CAN	BURETTE
OIL STONE	PIERRE À AFFUTER
OPENING	ORIFICE, OUVERTURE
PACKING	JOINT
PARRAFIN	PARAFINE
PETROL	ESSENCE
PIN	GOUPILLE
PINNED AND BRAZED JOINT	RACCORD GOUPILLÉ ET BRASÉ
PIPE	TUYAU
PIPING	TUYAUTERIE
PISTON STROKE	COURSE DU PISTON
PLATINUM	PLATINE
PLUG	BOUCHON
PRESSED STEEL	TÔLE EMBOUTIE
PUMICE STONE	PIERRE PONCE
PUMP	POMPE
RASP	RAPE
REINFORCEMENT SLEEVE	FOURRURE
RING	BAGUE, ANNEAU

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
ROD	TIGE, BARRE
ROLLED	LAMINÉ
ROUND NOSE PLIERS	PINCE RONDE
RUBBER	CAOUTCHOUC
RUSTY	ROUILLÉ
SAND	SABLE
SAND PAPER	PAPIER DE VERRE
SAW	SCIE
SCISSORS	CISEAUX
SCREW	VIS
SCREW DRIVER	TOURNE-VIS
SHEET IRON	TÔLE
SHELLAC	LAQUE
SHORT CIRCUIT	COURT-CIRCUIT
SLEDGE HAMMER	MASSE
SOAP	SAVON
SOCKET	DOUILLE
SOLDERING	SOUDER À L'ÉTAIN
SPACING SHIMS	CALE D'ÉPAISSEUR
SPANNER	CLEF
SPARK	ÉTINCELLE
SPINDLE	BROCHE
SPIRIT	ESSENCE
SPLASHING	BARBOTTAGE
SPLIT PIN	GOUPILLE FENDUE
SPLIT WASHER	RONDELLE GROVER
SPRING	RESSORT
STAND	TORON

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
STEM	TIGE
STEEL	ACIER
STEEL PLATE	TÔLE D'ACIER
STEEL WIRE	CABLE D'ACIER
STRAIGHT PIN	GOUPILLE CYLINDRIQUE
STRAINER	CRÉPINE
TAPE	CHATERTUN
TAPER PIN	GOUPILLE CONIQUE
THREAD	FIL
THUMB SCREW	VIS À OREILLE
TIGHT	ÉTANCHE
TIN	ÉTAIN
TIN PLATE	FER BLANC ÉTAMÉ
TOOLS	OUTILS
TO BEND	FAUSSER, FLAMBER, PLIER, TORDRE
TO BORE	PERCER
TO CAST	FONDRE
TO CLAMP	CRAMPONNER
TO DISTORT	FAUSSER, TORDRE
TO FASTEN	FIXER, ATTACHER, SERRER
TO FORGE	FORGER
TO FREE UP	DÉGRIPPER
TO GREASE	GRAISSER
TO GRIND	RODER
TO GRIP	GRIPPER

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
TO HOLLOW	EMBOUTIR
TO LINE UP	REDRESSER, DÉTORDRE
TO LUBRICATE	GRAISSER
TO MELT	FONDRE
TO PIERCE	PERCER
TO RIVET	RIVER
TO SCREW	VISSER, SERRER
TO SEIZE	GRIPPER
TO SOLDER	SOUDER À L'ÉTAIN
TO SPRING	FAUSSER, TORDRE
TO STAMP	ÉSTAMPER
TO STRAIGHTEN	REDRESSER
TO STRENGTHEN	RENFORCER
TO SUPPLY	FOURNIR, ALIMENTER, APPROVISIONNER
TO TAPER	ÉFFILER
TO TAKE APART	DÉMONTER
TO TIE	ATTACHER, LIER
TO UNSCREW	DÉVISSER
TO WASH	LAVER
TUBE	TUBE
TUBULAR	TUBULAIRE
UNIVERSAL DRIVING SHAFT	TRANSMISSION À LA CARDAN
USAGE	USURE

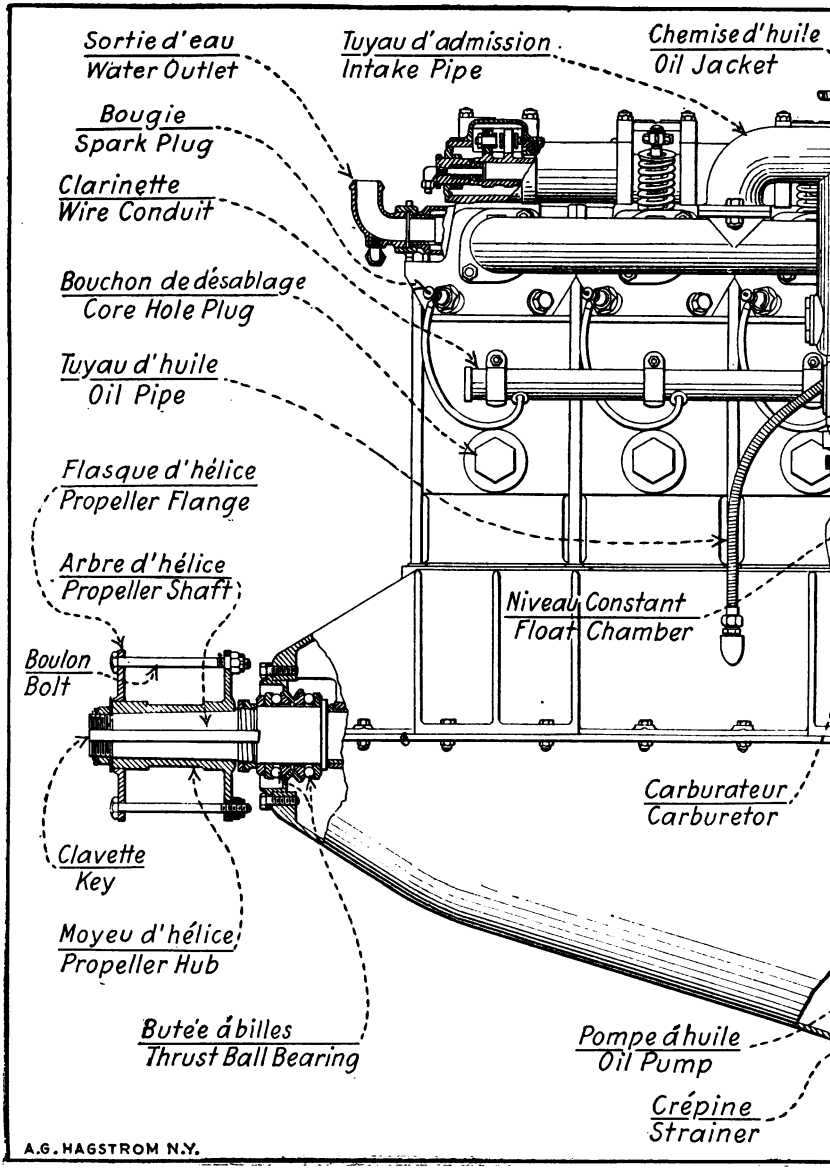
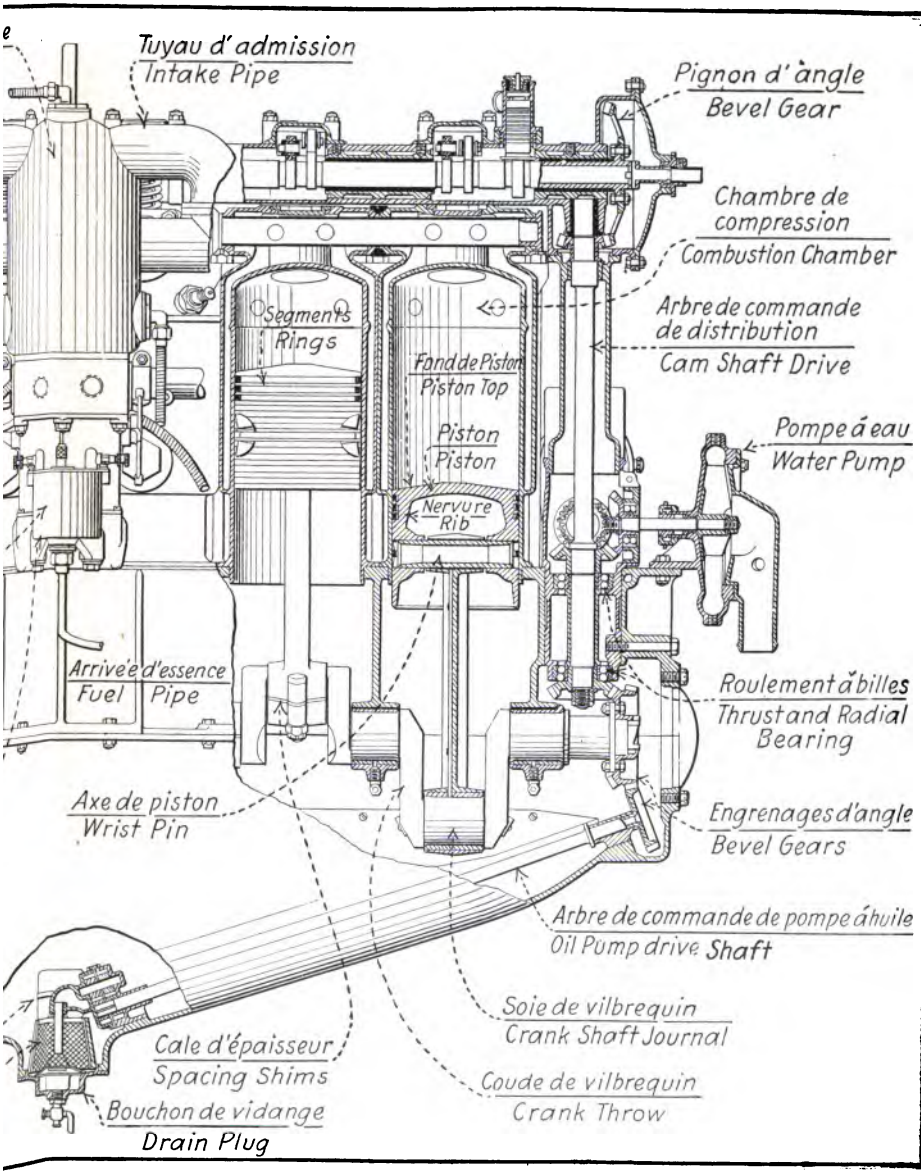


FIG. 6.—PART SECTIONAL VIEW OF SIX-CYLIN
MOTEUR D'AVION SIX CYLINDRES HALL-SCOTT



INDER HALL-SCOTT ENGINE SHOWING IMPORTANT PARTS
IT DEMIE COUPE, MONTRANT LES PARTIES PRINCIPALES

TOOLS AND SHOP TERMS	OUTILLAGE ET TERMES D'ATELIER
VARNISH	VERNIS
VISE	ÉTAU
WASHER	RONDELLE
WASTE	ÉTOUPE
WEDGE	CHEVILLE
WIRE CLOTH	TISSU MÉTALLIQUE
WORKSHOP	ATELIER
ZINC	ZINC

Metric System and English Equivalents.

The Metric System is based on the Meter which was designed to be one ten-millionth ($\frac{1}{10000000}$) part of the earth's meridian, passing through Dunkirk and Formentera. Later investigations, however, have shown that the Meter exceeds one ten-millionth part by almost one part in 6400. The value of the Meter, as authorized by the U. S. Government is 39.37 inches. The Metric system was legalized by the U. S. Government in 1866.

The three principal units are the meter, the unit of length, the liter, the unit of capacity, and the gram, the unit of weight. Multiples of these are obtained by prefixing the Greek words: deka (10), hekto (100), and kilo (1000). Divisions are obtained by prefixing the Latin words: deci ($\frac{1}{10}$), centi ($\frac{1}{100}$), and milli ($\frac{1}{1000}$). Abbreviations of the multiples begin with a capital letter, and of the divisions with a small letter, as in the following tables:

Measures of Length

10 millimeters (mm.) = 1 centimeter (cm.) = .3937 in.
10 centimeters = 1 decimeter (dm.)
10 decimeters = 1 meter (m.) = 3.28083 ft. = 39.37 ins.
10 meters = 1 dekameter (Dm.)
10 dekameters = 1 hektometer (Hm.)
10 hektometers = 1 kilometer (Km.) = 0.62137 mile

1 foot = .3048 meter
1 inch = 25.4 millimeters

Measures of Surface (not Land)

100 square millimeters ($mm.^2$) = 1 square centimeter ($cm.^2$) = 0.155 sq. in.
100 square centimeters = 1 square decimeter ($dm.^2$)
100 square decimeters = 1 square meter ($m.^2$) = 10.764 sq. ft.

1 square yard = .836 square meter
1 square foot = .0929 square meter
1 square inch = 645.2 square millimeters

Measures of Volume

1000 cubic millimeters ($mm.^3$) = 1 cubic centimeter ($cm.^3$) = .061 cu.in.
1000 cubic centimeters = 1 cubic decimeter ($dm.^3$) = 1 liter = 61.023 cu.ins.
1000 cubic decimeters = 1 cubic meter ($m.^3$) = 35.314 cu.ft. = 264.2 gallons

1 cubic yard = .7645 cubic meter
1 cubic foot = .02832 cubic meter
1 cubic inch = 16.387 cubic centimeters

Measures of Capacity

10 milliliters (ml.) = 1 centiliter (cl.)
10 centiliters = 1 deciliter (dl.)
10 deciliters = 1 liter (l.) = 1.0567 qts. (U.S.) = 61.023 cu.ins.
10 liters = 1 dekaliter (Dl.)
10 dekaliters = 1 hektoliter (Hl.)
10 hektoliter = 1 kiloliter (Kl.)

1 gallon (U.S.) = 3.785 liters
1 gallon (British) = 4.543 liters

Measures of Weight

10 milligrams (mg.) = 1 centigram (cg.)
10 centigrams = 1 decigram (dg.)
10 decigrams = 1 gram (g.) = 15.432 grains
10 grams = 1 dekagram (Dg.)
10 dekagrams = 1 hektogram (Hg.)
10 hektograms = 1 kilogram (Kg.) = 2.2046 pounds
1000 kilograms = 1 ton (T) = .9842 ton of 2240 pounds

NOTE—The gram is the weight of one cubic centimeter of pure distilled water at a temperature of 39.2° F.; the kilogram is the weight of 1 liter of water; the ton is the weight of 1 cubic meter of water.

1 grain = .0648 gram
1 pound = .4536 kilograms
1 ounce (Avd.) = 28.35 grams
1 ton of 2240 pounds = 1.016 metric tons

TIME PER MILE EXPRESSED IN MILES PER HOUR

Time for one mile Min.	Sec.		Miles Per hour	Time for one mile Min.	Sec.		Miles Per hour	Time for one mile Min.	Sec.		Miles Per hour
0	36	=	100.00	1	12	=	50.00	1	47	=	33.64
0	37	=	97.30	1	13	=	49.31	1	48	=	33.33
0	38	=	94.74	1	14	=	48.65	1	49	=	33.03
0	39	=	92.31	1	15	=	48.00	1	50	=	32.72
0	40	=	90.00	1	16	=	47.37	1	51	=	32.43
0	41	=	87.80	1	17	=	46.75	1	52	=	32.14
0	42	=	85.71	1	18	=	46.15	1	53	=	31.86
0	43	=	83.72	1	19	=	45.57	1	54	=	31.58
0	44	=	81.82	1	20	=	45.00	1	55	=	31.30
0	45	=	80.00	1	21	=	44.44	1	56	=	31.03
0	46	=	78.26	1	22	=	43.90	1	57	=	30.77
0	47	=	76.60	1	23	=	43.37	1	58	=	30.50
0	48	=	75.00	1	24	=	42.86	1	59	=	30.25
0	49	=	73.47	1	25	=	42.35	2	0	=	30.00
0	50	=	72.00	1	26	=	41.86	2	3	=	29.26
0	51	=	70.59	1	27	=	41.38	2	6	=	28.57
0	52	=	69.23	1	28	=	40.91	2	9	=	27.90
0	53	=	67.92	1	28	=	40.91	2	9	=	27.90
0	54	=	66.67	1	29	=	40.45	2	12	=	27.27
0	55	=	65.45	1	30	=	40.00	2	15	=	26.66
0	56	=	64.29	1	31	=	39.56	2	18	=	26.08
0	57	=	63.16	1	32	=	39.13	2	21	=	25.53
0	58	=	62.07	1	33	=	38.71	2	24	=	25.00
0	59	=	61.02	1	34	=	38.30	2	27	=	24.49
1	0	=	60.00	1	35	=	37.89	2	30	=	24.00
1	1	=	59.02	1	36	=	37.50	2	33	=	23.53
1	2	=	58.06	1	37	=	37.11	2	36	=	23.07
1	3	=	57.14	1	38	=	36.73	2	39	=	22.64
1	4	=	56.25	1	39	=	36.36	2	42	=	22.22
1	5	=	55.38	1	40	=	36.00	2	45	=	21.81
1	6	=	54.55	1	41	=	35.64	2	48	=	21.42
1	7	=	53.73	1	42	=	35.29	2	51	=	21.05
1	8	=	52.94	1	43	=	34.95	2	54	=	20.69
1	9	=	52.17	1	44	=	34.61	3	0	=	20.00
1	10	=	51.42	1	45	=	34.28				
1	11	=	50.70	1	46	=	33.96	..	..		....
								..	...		....

ENGLISH AND METRIC SPEED EQUIVALENTS

To obtain velocity in feet per second multiply the speed in miles per hour by 1.466+

Velocity ft. per sec. = Miles per hour x 1.466+

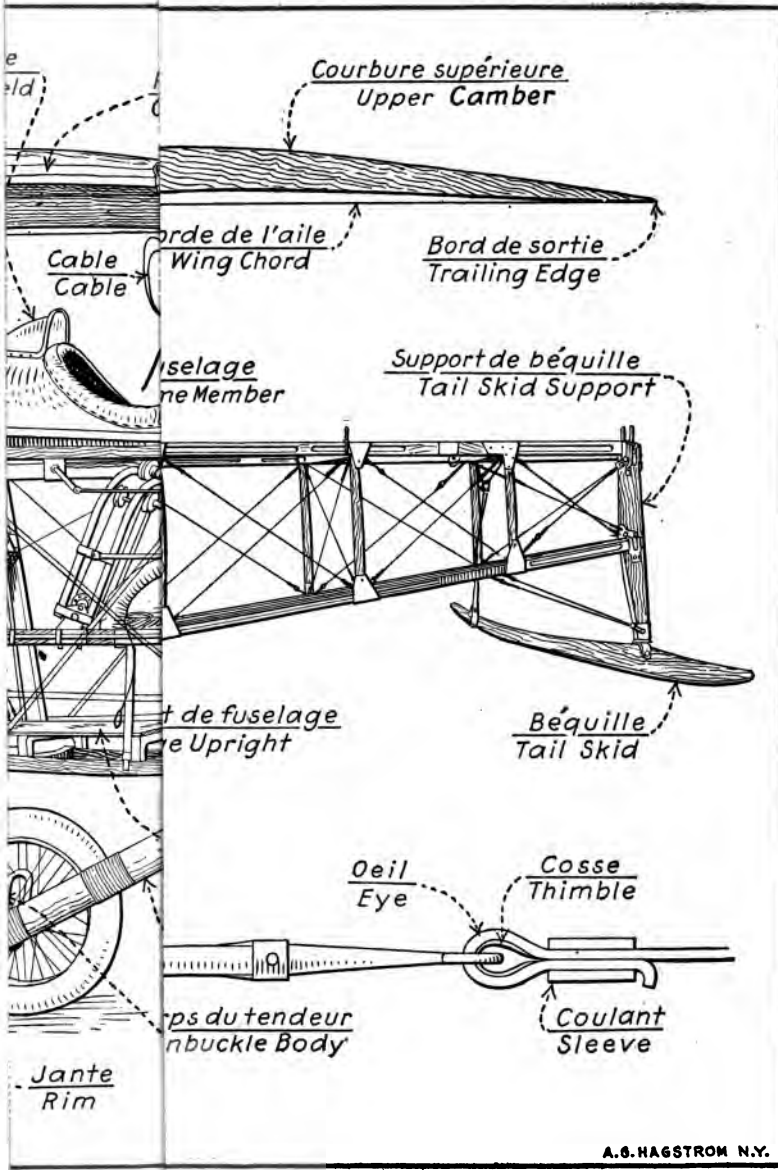
One mile per hour = 1.466 ft. per second = 88 ft. per minute = 0.447 meters per second = 26.8 metres per minute.

1 Km. per hour = 0.914 metres per second = 54.9 ft. per minute = 0.624 mi. per hour.

Table of Decimal Equivalents of Millimeters and Fractions of Millimeters

Mm.	Inches	Mm.	Inches	Mm.	Inches
$\frac{1}{50}$	.00079	$\frac{26}{50}$	.02047	2	.07874
$\frac{2}{50}$	.00157	$\frac{27}{50}$	.02126	3	.11811
$\frac{3}{50}$	.00236	$\frac{28}{50}$	.02205	4	.15748
$\frac{4}{50}$	.00315	$\frac{29}{50}$	.02283	5	.19685
$\frac{5}{50}$	.00394	$\frac{30}{50}$	.02362	6	.23622
$\frac{6}{50}$	.00472	$\frac{31}{50}$	.02441	7	.27559
$\frac{7}{50}$	.00551	$\frac{32}{50}$	.02520	8	.31496
$\frac{8}{50}$	.00630	$\frac{33}{50}$	.02598	9	.35433
$\frac{9}{50}$	.00709	$\frac{34}{50}$	.02677	10	.39370
$\frac{10}{50}$	.00787	$\frac{35}{50}$	.02756	11	.43307
$\frac{11}{50}$	.00866	$\frac{36}{50}$	.02835	12	.47244
$\frac{12}{50}$	.00945	$\frac{37}{50}$	.02913	13	.51181
$\frac{13}{50}$	.01024	$\frac{38}{50}$	.02992	14	.55118
$\frac{14}{50}$	.01102	$\frac{39}{50}$	.03071	15	.59055
$\frac{15}{50}$	.01181	$\frac{40}{50}$	.03150	16	.62992
$\frac{16}{50}$	.01260	$\frac{41}{50}$	.03228	17	.66929
$\frac{17}{50}$	.01339	$\frac{42}{50}$	.03307	18	.70866
$\frac{18}{50}$	01417	$\frac{43}{50}$	.03386	19	.74803
$\frac{19}{50}$	.01496	$\frac{44}{50}$	.03465	20	.78740
$\frac{20}{50}$	.01575	$\frac{45}{50}$	.03543	21	.82677
$\frac{21}{50}$	.01654	$\frac{46}{50}$	.03622	22	.86614
$\frac{22}{50}$	.01732	$\frac{47}{50}$	.03701	23	.90551
$\frac{23}{50}$	.01811	$\frac{48}{50}$	.03780	24	.94488
$\frac{24}{50}$	.01890	$\frac{49}{50}$	.03858	25	.98425
$\frac{25}{50}$	.01969	1	.03937	26	1.02362

10 mm. = 1 Centimeter = 0.3937 inches.
10 cm. = 1 Decimer = 3.937 inches.
10 dm. = 1 Meter = 39.37 inches.
25.4 mm. = 1 English inch.



ERED AIRPLANE OF CONTROL MEMBERS, ETC.

FUSELAGE D'AV ETC.

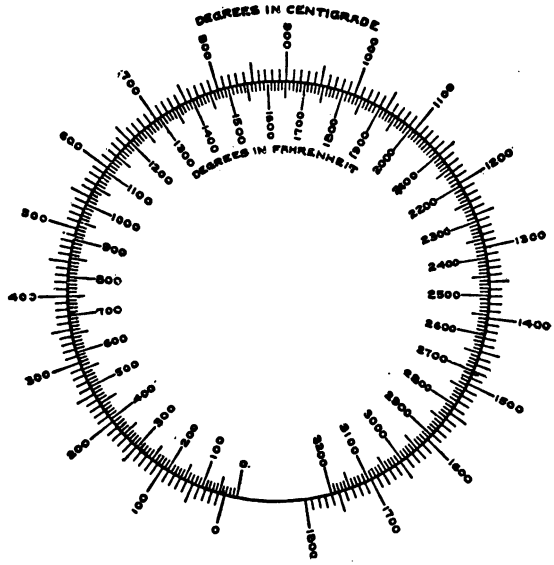


FIG. 8.—COMPARATIVE SCALE—FAHRENHEIT AND CENTIGRADE THERMOMETERS

TEMPERATURE CONVERSION FACTORS

	Boiling-point of water at sea level	
Fahrenheit thermometer	212 degrees	Degrees Fahrenheit =
Centigrade thermometer	100 degrees	Degrees Centigrade =
Reaumur thermometer	80 degrees	Degrees Reaumur =

$$\frac{\text{Degrees Centigrade} \times 9}{5} + 32 = \frac{\text{Degrees Beaumur} \times 9}{4} + 32$$

$$\frac{(\text{Degrees Fahrenheit} - 32) \times 5}{9} = \frac{\text{Degrees Reaumur} \times 5}{4}$$

$$\frac{\text{Degrees Centigrade} \times 4}{5} = \frac{(\text{Degrees Fahrenheit} - 32) \times 4}{9}$$

GLOSSARY OF

AVIATION TERMS

FRENCH—ENGLISH

TERMES D'AVIATION

FRANCAIS—ANGLAIS

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
ACROBATIES	STUNTS
AERONAT	AIRSHIP
ALTIMÈTRE	HEIGHT INDICATOR—ALTIMETER
ALTITUDE	ALTITUDE
ANGLE D'ATTAQUE	ANGLE OF ATTACK
ANGLE D'INCIDENCE	ANGLE OF INCIDENCE
ATTERRIR	TO LAND
ATTERRISSAGE	LANDING
AVION	AIRPLANE
Avion de Chasse	Battling Plane
Avion de Reconnaissance	Reconnoitering Plane
Avion de Bombardement	Bombarding Plane
AVIATEUR	AVIATOR, AIRMAN
BALLON	BALLOON
BAROGRAPHE	BAROGRAPH

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
BESSONNEAU (HANGAR) (du nom du constructeur)	CANVAS HANGAR (from the name of the maker)
BOUSSOLE	COMPASS
CABRER, CABRÉ	TO NOSE UP
CALE	CHOCK
CAPOTER	TO TURN OVER, TO SOMERSAULT
CARTE	MAP
CASQUE	HELMET
CENTRE DE GRAVITÉ	CENTER OF GRAVITY
CENTRE DE POUSSÉE	CENTER OF THRUST
CENTRE DE PRESSION	CENTER OF PRESSURE
CHANDELLE (Comm.)	ZUHM, ZUHMING, ZOOM
CHAUSSONS FOURRÉS	FUR LINED BOOTS
CHEVAL DE BOIS (Comm.) (Tournant involontaire au sol)	CARROUSEL (MERRY-GO-ROUND) (Involuntary turning sharp on the ground)
COÉFFICIENT DE SÉCURITÉ	FACTOR OF SAFETY
COMBINAISON	UNION SUIT
COUPER L'ALLUMAGE	TO SWITCH OFF
COUCOU (Comm.)	PLANE, BUS (Comm.)
COURBURE	CAMBER
DÉCALÉS (PLANS)	STAGGERED WINGS

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
DÉCOLLER	TO LEAVE THE GROUND
DÉPORTER (être déporté)	TO DRIFT (to be drifted)
DÉRAPER DÉRIVE	DRIFT, WINDWAY
DIÈDRE	DIHEDRAL
DOUBLE COMMANDE	DUAL CONTROL
DRAP D'ATTERRISSAGE	LANDING SHEET
ENGIN	APPARATUS
ENVERGURE	WING SPAN
ÉQUILIBRE	BALANCE, EQUILIBRIUM
ESCADRILLE	SQUADRON
FEU D'ATTERRISSAGE	FLARE
FEUILLE MORTE (descente en)	DEAD LEAF
FORCE ASCENSIONNELLE FORCE DE SUSTENTATION	LIFT
FORCE MOTRICE	MOTIVE POWER
GANTS FOURRÉS	FUR LINED GLOVES
GAUCHIR	TO BANK (or any action on lateral control)

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
GAUCHISSEMENT	WING WARPING
GLISSADE SUR L'AILE	SIDE CLIP
GLISSADE SUR LA QUEUE	TAIL DIVE
HANGAR	HANGAR
HYDROAEROPLANE	HYDROAIRPLANE, SEAPLANE
INCIDENCE	INCIDENCE
INCIDENCE VARIABLE	CHANGEABLE ANGLE OF INCIDENCE
INCLINER	TO TILT, TO BANK
INDICATEUR DE VITESSE	SPEED INDICATOR
LIGNE DE VOL	LINE OF FLIGHT
LOOPING	LOOPING THE LOOP
LUNETTES	GOGGLES
MANCHE À VENT	WIND CONE
MARCHER EN CRABE	CRABBING
METTRE LE CONTACT	TO SWITCH ON
METTRE EN MARCHE	TO START THE ENGINE
MONTER	TO CLIMB
MOTEUR	ENGINE
NACELLE	BASKET OR CAR

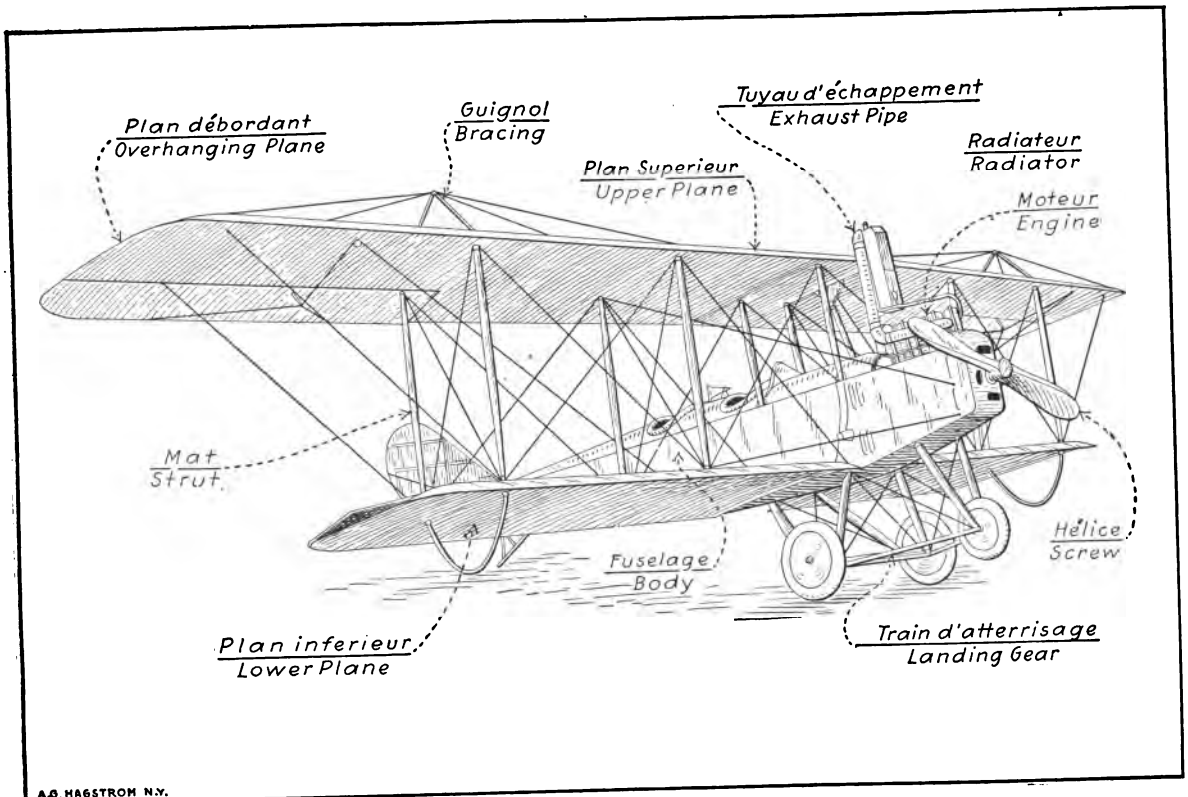


FIG. 10.—THREE-QUARTER FRONT VIEW OF TRACTOR BIPLANE
BIPLAN À HÉLICE TRACTIVE VU DE TROIS-QUARTS

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
OBSERVATEUR	OBSERVER
ORIENTATION	ORIENTATION
ORIENTER (S')	To find one's position or one's way
PANNE	BREAKDOWN
PAS D'HÉLICE	PROPELLER PITCH
PENCHER	TO BANK, TO TILT
PERTE DE VITESSE (Atterrissage)	PANCAKE (Landing)
PERTE DE VITESSE (en l'air)	STALL
PILOTE	PILOT
PIQUER	TO DIVE, TO NOSE DOWN
PLAFOND / PLAFONNER	END OF CLIMB
PLANER (Volplane)	GLIDE
PYLONE	PYLON
SE METTRE EN PYLONE	LANDING ON NOSE & REMAINING TAIL HIGH
RALENTI	SLOW SPEED
RASE MOTTES (faire du)	GRASS CUTTING (flight)
RÉGIME	SPEED OF ROTATION

TERMES EMPLOYÉS SUR L'AERODROME	FLYING FIELD TERMS
RÉGLAGE	REGULATION, ADJUSTMENT
RÉGLAGE DE L'INCIDENCE	WASH IN, WASH OUT
REMOUS	ROCKING
RENVERSEMENT	TURN OVER ON THE WING
RÉSISTANCE À L'AVANCEMENT	DRAG
ROULER AU MOTEUR	TO TAXI
SOUFFLER (un avion)	PROPELLER WASH
SURVOLER	TO FLY OVER
TANGENT	LOGGY, SLUGGISH
TAXI (Comm.)	PLANE, BUS (Comm.)
TERRAIN D'ATTERRISSAGE	LANDING GROUND
TRAJECTOIRE	TRAJECTORY
VIRAGE	TURNING, VEERING
VRILLE	TAIL SPIN
ZINC (Comm.)	PLANE, BUS (Comm.)
L'AVION	**THE PLANE**
AILERONS	TILTING WINGS, WING FLAPS

L'AVION	THE PLANE
AILES	WINGS, PLANES
ALTIMÈTRE	HEIGHT INDICATOR, ALTIMETER
ARAIGNÉE DE MOTEUR	ENGINE SUPPORT SPIDER
ARÉTIER ARRIERE	TRAILING EDGE
ARÉTIER AVANT	LEADING EDGE
ATTACHE	FASTENING
ATTACHE D'AILE	WING SUPPORT
ATTACHER	TO TIE
AVION	AIRPLANE, PLANE
BALAI (MANCHE À)	CONTROL STICK (JOY STICK)
BAROGRAPHE	BAROGRAPH
BÉQUILLE	TAIL SKID, SPRAG
BERCEAU DE MOTEUR	ENGINE BED
BIPLACE	TWO-SEATERS
BIPLAN	BIPLANE
BLINDAGE	SHEETING
BOIS CREUX	HOLLOW WOOD
BORD D'ATTAQUE	LEADING EDGE
BORD DE SORTIE	TRAILING EDGE
BOULON	BOLT
BOURRELETS	PADDING
BOUSSOLE	COMPASS
BOWDEN	FLEXIBLE SHAFT
BRAS {Avant / Arrière} D'AILE	WING SPAR {Front / Back}

L'AVION	THE PLANE
CABANE	CABANE
CABLE	CABLE, STRANDED WIRE
CAPOT	HOOD, COIL
CARLINGUE	COCKPIT
CEINTURE DE SURETÉ	SAFETY BELT
CEINTURE LOOPING	SAFETY BELT WITH SUSPENDERS
CELLULE	CELLULE
CHARNIÈRE	HINGE, KNUCKLE
CHASSIS	FRAME
COMMANDES	CONTROLLING ELEMENTS
COMMANDES À PONT	CONTROL BRIDGE (Deperdussin-Curtiss)
COMPTE TOURS	TACHOMETER
CONTACT	SWITCH
CONTRE FICHE (Train d'atterrissage)	BRACING STRUT (Landing gear)
CONTREPLAQUÉ	LAMINATED WOOD
CORDE	ROPE
CORDE (Geometrie)	CHORD (Geometry)
CORDE À PIANO	PIANO WIRE, HARD WIRE
COSSE	THIMBLE
COULANT	SLEEVE
COURBURE	BEND, CAMBER
COUSSIN	CUSHION
CROISILLON	BRACING

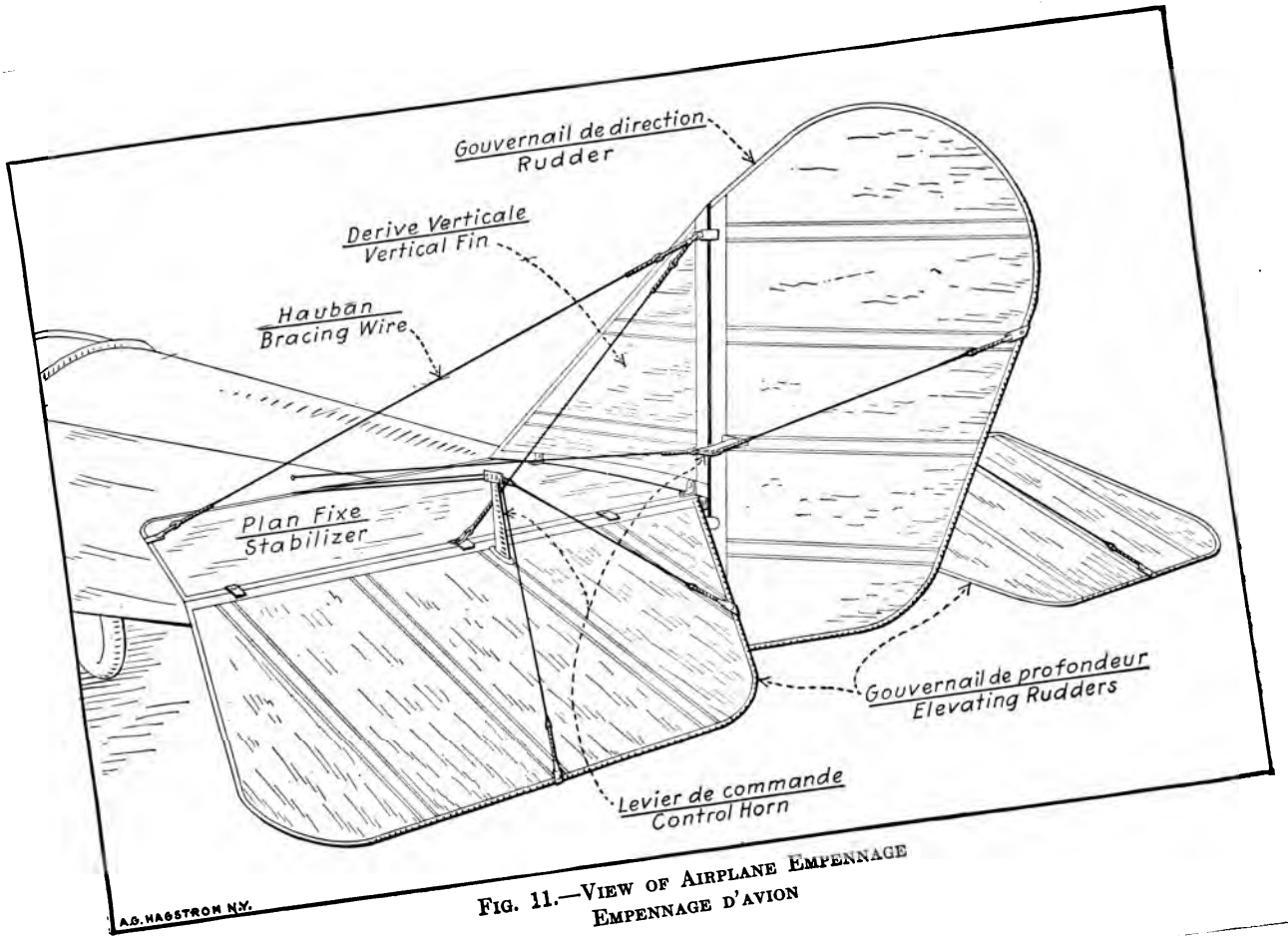


FIG. 11.—VIEW OF AIRPLANE EMPENNAGE
EMPENNAGE D'AVION

L'AVION	THE PLANE
DÉRIVE	TAIL FIN
ÉCROU	NUT
EMPENNAGE	STABILITY PLANES OF THE TAIL
ENDUIT	DOPE
ENTOILAGE	WING COVERING
ENVERGURE	WING SPAN
ESSIEU	AXLE
ETRIER	STIRRUP
EXTENSEUR	SHOCK ABSORBER
FERRURES	FITTINGS
FLASQUE D'HÉLICE	PROPELLER FLANGE
FREIN (de cable)	SAFETY WIRE
FUSÉE D'ESSIEU	AXLE SPINDLE
FUSELAGE	BODY, FUSIFORM FRAME
GLISSIÈRE	GUIDE, SLIDE
GODETS	FITTINGS
GOUVERNAIL DE DIRECTION	RUDDER
GOUVERNAIL DE PROFONDEUR	ELEVATOR
GUIGNOL	HORN, BRACING POST
HAUBAN HAUBANNAGE	BRACING WIRES
HÉLICE	PROPELLER, SCREW

L'AVION	THE PLANE
HÉLICE TRACTIVE	TRACTOR SCREW
HÉLICE PROPULSIVE	PROPELLER, PUSHER SCREW
HOUSSE	COVER
JAMBE DE FORCE (Train d'atterrissage)	BRACING STRUT (Landing gear)
JANTE	RIM
LONGERON	LONGERON, LONGITUDINAL SPAR
MANCHE À BALAI	CONTROL STICK, JOY STICK
MANETTE	THROTTLE
MARCHEPIED	FOOT PAD
MAROUFLAGE	CLOTH WINDING
MAT MONTANT	STRUT
MONOPLACE	SINGLE SEATER
MONOPLAN	MONOPLANE
MOYEU	HUB
NERVURES	WING RIBS
PALE D'HÉLICE	BLADE OF SCREW
PALONNIER	FOOT LEVER, RUDDER BAR
PANNEAU	SIDE PANEL
PARE BRISE	WIND SHIELD

L'AVION	THE PLANE
PATIN, PATINNAGE	SKID, RUNNER
PATIN DE GLISSIÈRE	BRONZE BEARING OF AXLE GUIDE
PÉDALE	PEDAL
PERSIENNES	LOUVRES
PIED	SUPPORTING CASTING
PLAN	PLANE, WING
PLAN CENTRAL	CENTRAL PANEL
PLAN DÉBORDANT	OVERHANG
PLAN DE DÉRIVE	STABILIZING FIN
PLAN FIXE DE QUEUE	STABILIZER
PLANCHER	FLOORING
PNEU, PNEUMATIQUE	TIRE
POIGNÉE	HANDLE
POMPE À PRESSION	PRESSURE PUMP
PORTE-CARTES	MAP-HOLDER
PORTE DE VISITE	DOOR FOR EXAMINATION
POULIE	PULLEY
PROFIL	FAIRING
PROFILER	TO FAIR, TO STEAM LINE
QUEUE	TAIL
RAYONS	SPOKES
RÉSERVOIR	TANK
RÉSERVOIR EN CHARGE	GRAVITY TANK

L'AVION	THE PLANE
RÉSERVOIR SOUS PRESSION	PRESSURE TANK
ROUE	WHEEL
SANDOW (Amortisseur) (Comm.)	SHOCK ABSORBER
SEMELLE DE PATINNAGE	SKID RUNNER
SIÈGE	SEAT
STABILISATEUR ou GOUVERNAIL DE PROFONDEUR	ELEVATOR, FLIPPERS
TENDEUR	WIRE STAY, TURN BUCKLE
TIGE DE TRANSMISSION	CONNECTING LINK
TIRANT	BRACING TUBES
TOILE	LINEN
TOURELLE	TURRET
TRAIN D'ATTERRISSAGE	LANDING GEAR
TRANSFIL	CORD WINDING
TRANSMISSION FLEXIBLE ou BOWDEN	FLEXIBLE SHAFT (Bowden wire)
TRIPLACE	THREE-SEATERS
TRIPLAN	TRIPLANE
TUBE	TUBE
TUBE DE NIVEAU	GLASS GAUGE

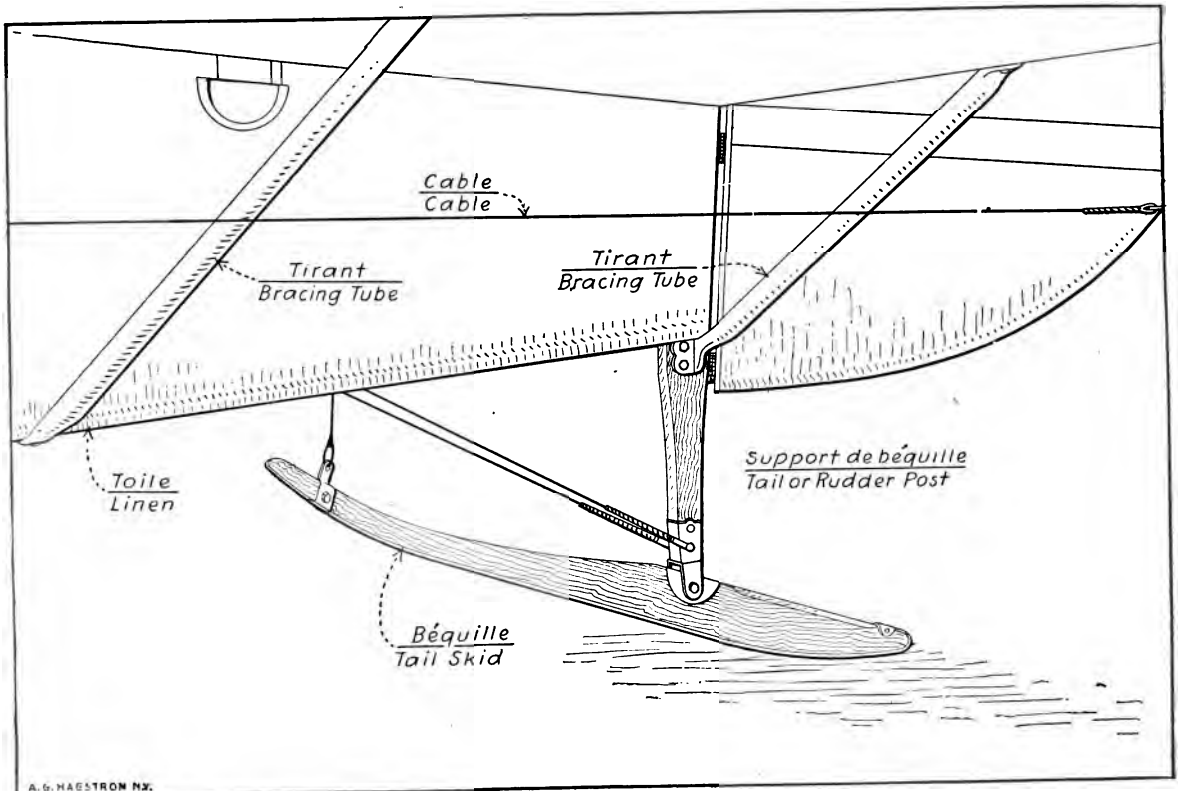


FIG. 12.—VIEW SHOWING TAIL SKID AND RUDDER POST
BEQUILLE ET SUPPORT

L'AVION	THE PLANE
VERNIS	VARNISH
VOLANT DE DIRECTION	STEERING WHEEL
LE MOTEUR	**THE ENGINE**
ACCÉLÉRER	TO ACCELERATE
ACCUMULATEUR	STORAGE BATTERY
ADMISSION	INLET
AIMANT	MAGNET
ALIMENTATION	FEEDING
ALLUMAGE	IGNITION
ANTIFRICTION	BABBITT METAL
ARAIGNÉE DE MOTEUR	ENGINE SUPPORT SPIDER
ARBRE	SHAFT
ARBRE À CAMES	CAMSHAFT
ARBRE SECONDAIRE	COUNTERSHAFT
ARRIVÉE D'ESSENCE	FUEL PIPE
ASPIRATION	SUCTION
AVANCE À L'ALLUMAGE	ADVANCE SPARKING
AXE	AXLE, AXIS
AXE D'UN LEVIER (Point d'appui)	FULCRUM
BATTERIE	CELL
BERCEAU DE MOTEUR	ENGINE BED
BIELLE	CONNECTING ROD

LE MOTEUR	THE ENGINE
BOBINE	COIL
BOUCHON DE VIDANGE	DRAIN PLUG
BOUCHON DE DESSABLAGE	CORE HOLE PLUG
BOUGIE	SPARK PLUG
BOULON	BOLT
BOYAU (Caoutchouc)	HOSE
BUTÉE A BILLES	THRUST BEARING (BALL)
CABILLOT	TOGGLE
CAME	CAM
CARBURATEUR	CARBURETOR
CARTER	GEAR CASE, CRANK CASE
CHAINE	CHAIN
CHAMBRE DE COMPRESSION	COMBUSTION CHAMBER
CHATERTUN	TAPE
CHAUDIÉRE	BOILER
CHEMINÉE D'ASPIRATION	MIXTURE PIPE
CHEMISE D'EAU	WATER JACKET
CHEVAL VAPEUR (H.P.)	HORSE POWER
CLAPET	VALVE
CLARINETTE ou CONDUIT DE FILS	WIRE CONDUIT
COGNER	KNOCKING

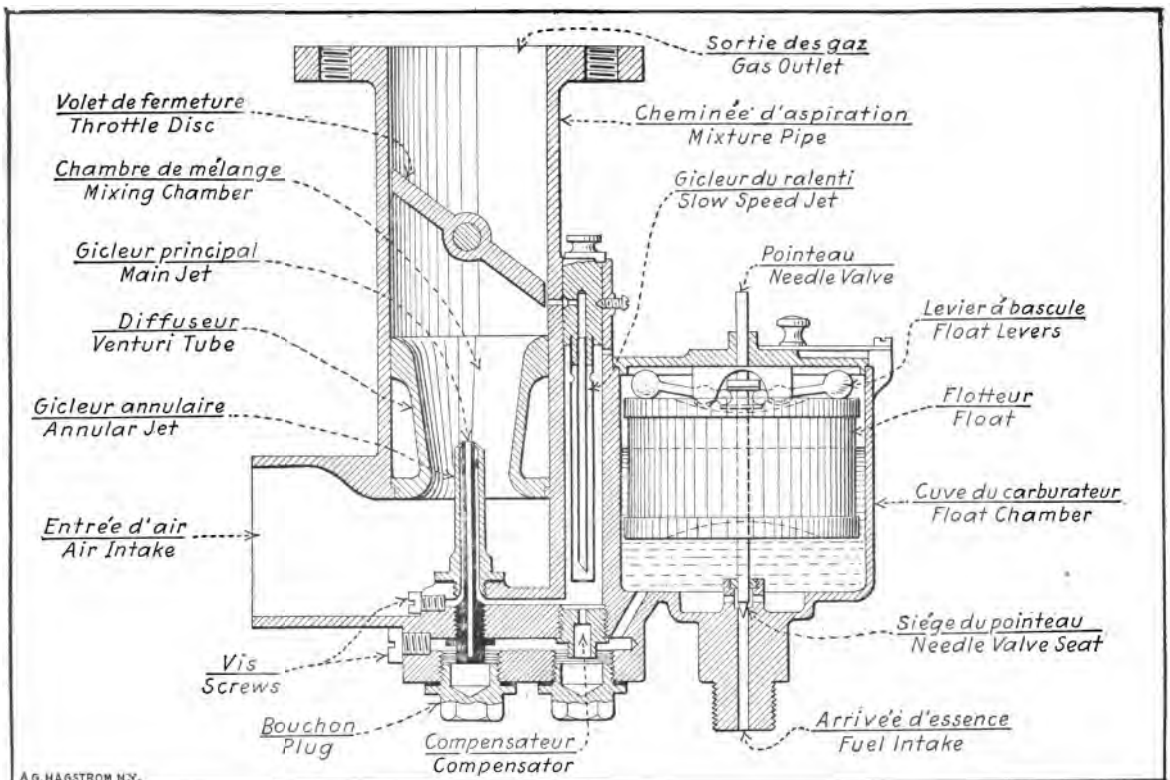


FIG. 13.—SECTIONAL VIEW OF ZENITH AIRPLANE ENGINE CARBURETOR
COUPE DU CARBURATEUR ZENITH POUR MOTEURS AVIONS

LE MOTEUR	THE ENGINE
COLLECTEUR D'ÉCHAPPEMENT	EXHAUST MANIFOLD
COMPENSATEUR	COMPENSATOR
COUDE DE VILBREQUIN	CRANK THROW
COUSSINET	BEARING BOX
CULASSE	CYLINDER HEAD
CULBUTEUR	ROCKER
CYLINDRE	CYLINDER
DÉMULTIPLICATEUR	REDUCTION GEARING
DIFFUSEUR	VENTURI TUBE
DISPOSITIF DE RUPTURE	CONTACT BREAKER
DISTRIBUTEUR	DISTRIBUTOR
DURIT	INDIA-RUBBER PIPE, GASOLINE HOSE
ÉCHAPPEMENT	EXHAUST
ÉCROU	NUT
EMBRAYAGE	CLUTCH
ENGRENNAGE	GEAR
FIL DE BOUGIE	SPARK PLUG WIRE
FIL DE MASSE	GROUND WIRE
FREIN	BRAKE
FLOTTEUR	FLOAT
GALET	CAM ROLLER

LE MOTEUR	THE ENGINE
GICLEUR	INJECTOR, SPRAY NOZZLE
GOUPILLE	SPLIT PIN
GOUTTIÈRE	OIL GROOVE
GRAISSEUR	GREASE or OIL CUP
GUIDE DE SOUPAPE	VALVE GUIDE
JOINT	PACKING
MAGNETO	MAGNETO
MANCHE À AIR	AIR FEEDER
MANIVELLE	CRANK
MANOMÈTRE	PRESSURE METER
MOLETTE	ADJUSTING NUT
MOTEUR	ENGINE
NIVEAU CONSTANT	FLOAT CHAMBER
PALIER	BASE BEARING
PANNE	MISHAP, BREAKDOWN
PARAFOUDRE	SAFETY GAP
PATTES D'ARAIGNÉES	OIL GROOVES (in bearing)
PIGNON	COG, PINION
PIGNON CONIQUE	BEVEL GEAR
PILE	BATTERY
PILE SÈCHE	DRY BATTERY
POINTEAU	NEEDLE VALVE
POMPE	PUMP

LE MOTEUR	THE ENGINE
POMPE D'ALIMENTATION	FEED-PUMP
PRESSION	PRESSURE
PRIMAIRE	PRIMARY
RADIATEUR	RADIATOR
RATÉS	MISSING
REGULATEUR	GOVERNOR
RENIFLARD	BREATHER PIPE
RÉSERVOIR	TANK
RESSORT	SPRING
RESSORT À BOUDIN	COIL SPRING
RESSORT À LAMES	LEAF SPRING
RETARD À L'ÉCHAPPEMENT	LATE EXHAUST VALVE TIME or LAG
ROBINET DE COMPRESSION	PETCOCK (Compression Relief)
RODER	TO GRIND
ROTATIF	ROTARY
ROULEMENT À BILLES	BALL BEARING
RUPTEUR	CONTACT BREAKER
SEGMENT	SEGMENT, PISTON RING
SIÈGE DE SOUPAPE	VALVE SEAT
SOIE DU VILBREQUIN	CRANK SHAFT JOURNAL
SOUPAPE	VALVE
SOUPAPE D'ADMISSION	INLET VALVE

LE MOTEUR	THE ENGINE
SOUPAPE D'ÉCHAPPEMENT	EXHAUST VALVE
TIGE DE SOUPAPE	VALVE STEM
TREMBLEUR	COIL VIBRATOR
TUYAU	PIPE
TUYAU D'ARRIVÉE	INLET PIPE
TUYAU D'ÉCHAPPEMENT	EXHAUST PIPE
VILBREQUIN	CRANKSHAFT
VIS	SCREW
VIS DE RÉGLAGE	REGULATING SCREW
VIS PLATINÉE	PLATINUM TIPPED SCREW
VOLANT	FLYWHEEL
VOLET (Carburateur)	THROTTLE DISK

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
ACIDE	ACID
ACIER	STEEL
ACIER FONDU	CAST STEEL
ALCOOL	ALCOHOL
ALÉSAGE	BORE
ALLIAGE	ALLOY
ALUMINIUM	ALUMINUM

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
AMIANTE	ASBESTOS
AMPÈRE	AMPERE
ANNEAU	RING
ANTIFRICTION	BABBITT METAL
APPROVISIONNER	TO SUPPLY
ARMATURE	ARMATURE
ATELIER	WORKSHOP
BAGUE	RING
BAIN	BATH
BARBOTAGE	SPLASHING
BARRE	ROD
BIDON	CAN
BISEAU	BEVEL
BOUCHON	PLUG, CORK
BOULON	BOLT
BRASER	BRAZING
BRIDE	FLANGE
BROCHE	SPINDLE
BRONZE	BRONZE
BURETTE	OIL CAN
BURIN	CAPE CHISEL
CALE D'ÉPAISSEUR	SPACING SHIMS
CAOUTCHOUC	RUBBER
CARDAN	UNIVERSAL DRIVING SHAFT
CHALUMEAU	BLOW TORCH
CHAMOIS (peau de)	CHAMOIS SKIN

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
CHARBON	COAL
CHATERTUN	TAPE
CHEVILLE	WEDGE
CISEAU À FROID	CHISEL
CISEAUX	SCISSORS
CLAVETTE	KEY
CLEF	SPANNER
CLEF ANGLAISE CLEF À MOLETTE	ADJUSTABLE WRENCH
CLOU	NAIL
COMPAS	COMPASSES
CORNIÈRE	ANGLE IRON
COULISSE	LINK MOTION
COURSE DU PISTON	PISTON STROKE
COURT-CIRCUIT	SHORT CIRCUIT
COUVERCLE	COVER
CRAMPONNER	TO CLAMP
CRAN	NOTCH
CRÉPINE	STRAINER
CRIC	JACK
DEGRÉ	DEGREE
DÉGRIPPER	TO FREE UP
DÉMONTER	TO TAKE APART
DÉVISSER	TO UNSCREW
DOUILLE	SOCKET
ÉBONIT	EBONITE
ÉCROU	NUT

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
EFFILER	TO TAPER
EMAILLITE	KIND OF DOPE FOR THE PLANES
EMBOUTIR	TO HOLLOW
ENCLUME	ANVIL
ENTONNOIR	FUNNEL
ESSENCE	PETROL, SPIRIT, GASOLINE
ESTAMPER	TO STAMP
ÉTAIN	TIN
ÉTANCHE	TIGHT
ÉTAU	VISE
ÉTINCELLE	SPARK
ÉTOUPE	WASTE
FAUSSER	TO SPRING, TO DISTORT
FENTE	CRACK
FER	IRON
FER BLANC	TIN PLATE
FERRURE	IRON MOUNTING
FIL	THREAD or FINE WIRE
FIL DE FER	IRON WIRE
FIL DE CUIVRE	COPPER WIRE
FIL ELECTRIQUE	ELECTRIC WIRE
FLAMBER (se tordre)	TO BEND
FONTE	CAST IRON
FORET	HAND DRILL

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
FORGER	TO FORGE
FONDRE	TO CAST, TO MELT
FOURRURE	REINFORCING SLEEVE
FUITE	LEAKAGE
GALVANISÉ	GALVANIZED
GORGE	GROOVE
GOUPILLE	PIN
GOUPILLE CONIQUE	TAPER PIN
GOUPILLE CYLINDRIQUE	STRAIGHT PIN
GOUPILLE FENDUE	SPLIT PIN
GRAISSE	GREASE, FAT, LUBRICANT
GRAISSER	TO GREASE, TO LUBRICATE
GRIPPER	TO SEIZE, TO STICK, TO GRIP
HUILE	OIL
HUILE DE RICIN	CASTOR OIL
HUILE MINÉRALE	MINERAL OIL
ISOLANT	INSULATOR
JAUGE	GAUGE
JOINT	PACKING

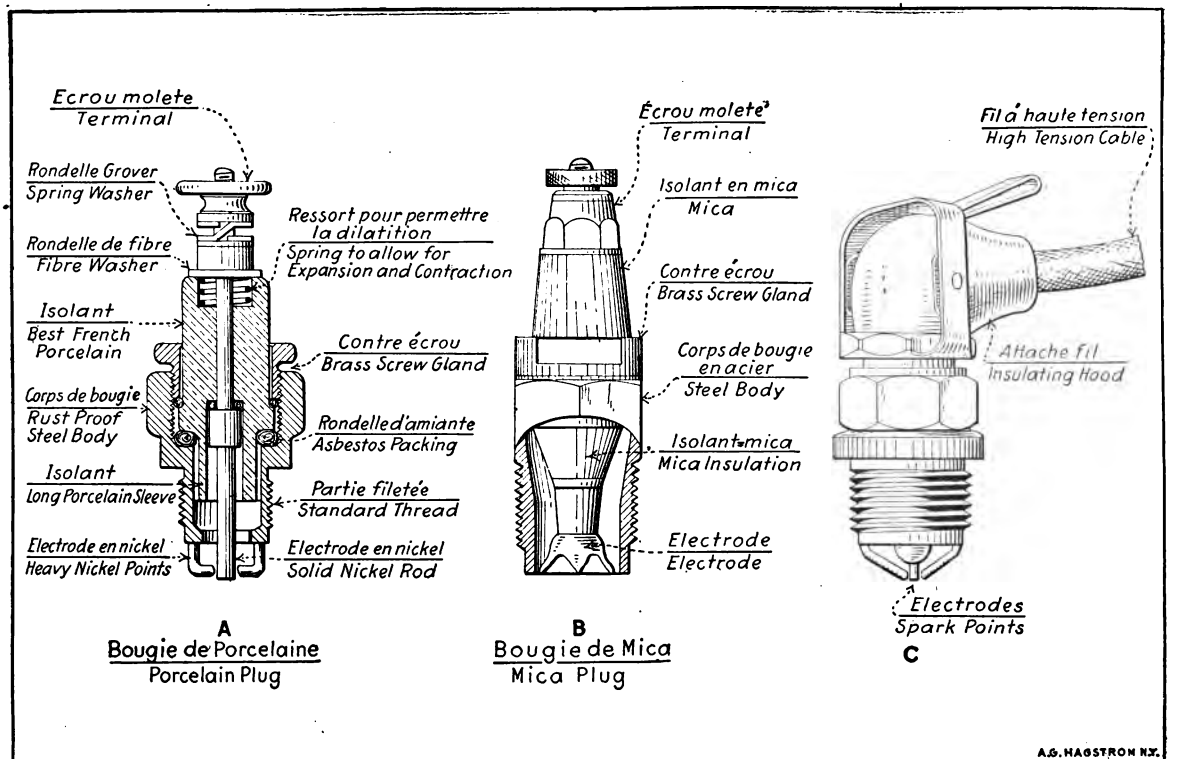


FIG. 14.—TYPICAL SPARK PLUG DESIGNS
TYPES DE BOUGIES D'ALLUMAGE

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
LAME	BLADE
LAMINÉ	ROLLED
LAMPE À SOUDER	BLOW TORCH
LAQUE	SHELLAC
LAVER	TO WASH
LEVIER	LEVER
LIER	TO TIE
LIME	FILE
MAILLON	LINK
MANCHE	HANDLE
MANDRIN	MANDREL
MARTEAU	HAMMER
MASSE	SLEDGE HAMMER
MÈCHE	BIT
MICA	MICA
NICKEL	NICKEL
NŒUD	KNOT
ORIFICE	OPENING
OUTILS OUTILLAGE	TOOLS
PAPIER DE VERRE	SAND PAPER
PARAFINE	PARAFFIN
PEAU DE CHAMOIS	CHAMOIS SKIN
PÉTROLE (LAMPANT)	KEROSENE
PERCER	TO BORE, TO PIERCE

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
PIERRE À AFFUTER	OIL STONE
PINCE (LEVIER)	CROW BAR
PINCE PLATE	FLAT PLIERS
PINCE RONDE	ROUND NOSE PLIERS
PINCE COUPANTE	CUTTING PLIERS
PLATINE	PLATINUM
PLIER	TO BEND
PLOMB	LEAD
POMPE	PUMP
PONCE	PUMICE STONE
POT DE FLEURS	SPECIAL STAND FOR DISMOUNTING ROTARY ENGINE
RABOT	PLANE
RACCORD	JOINT
RACCORD GOUPILLÉ ET BRASÉ	PINNED AND BRAZED JOINT
RAPE	RASP
REDRESSER	TO STRAIGHTEN, TO LINE UP
REFROIDIR	TO COOL
RENFORCER	TO STRENGTHEN
RESSORT	SPRING
RIVER	TO RIVET
ROBINET	COCK
RODER	TO GRIND
RONDELLE	WASHER
RONDELLE GROVER	SPLIT WASHER

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
ROUILLÉ	RUSTY
RUPTURE	BREAK
SABLE	SAND
SAC	BAG
SAVON	SOAP
SCIE	SAW
SERRER	TO FASTEN, TO SCREW
SOUDURE	SOLDERING
SOUDURE AUTOGÈNE	AUTOGENOUS WELDING
SOUDER À L'ÉTAIN	TO SOLDER
TAMIS	STRAINER
TIGE	ROD, STEM
TIREFONDS	LAG SCREW
TISSU METALLIQUE	WIRE CLOTH
TOILE ÉMERI	EMERY CLOTH
TÔLE	SHEET IRON
TÔLE EMBOUTIE	PRESSED STEEL
TÔLE D'ACIER	STEEL PLATE
TORON	STAND
TOUR	LATHE
TOURILLON	AXLE END
TOURNEVIS	SCREW DRIVER
TUBE	TUBE
TUBULAIRE	TUBULAR
TUYAU	PIPE
TUYAUTERIE	PIPING

OUTILLAGE ET TERMES D'ATELIER	TOOLS AND SHOP TERMS
VÉRIN	JACK SCREW
VERNIS	VARNISH
VIDANGE	EMPTYING
VIS	SCREW
VIS À OREILLE	THUMB SCREW
VRILLE	GIMLET
USURE	USAGE
ZINC	ZINC

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